There are two varieties of the common bee, now well known in all civilized countries, viz.: the German or Black Bee and the Italian or Ligurian Bee. The first named is the bee first introduced into America, and the only bee known here until 1860, when the Italians were first imported. The name is derived from Germany, where it has for centuries been domesticated and kept in great numbers. This bee is not black, but rather a grey brown. It was first spread over the world through the superior activity of the German colonists. Of the German bee there are quite a number of sub-varieties, prominent among which are the *Heath* bee of the north of Germany, a variety said to be much inclined to swarm. The *Carniolan* bees of Southwestern Australia are a very gentle race of Germans, which have been much extolled of late years for their valuable honey-gathering qualities. Other races, named from the region where found, and all having qualities of more or less value are the *Hungarian* longer and grayer than the German bee; the *Dalmatian* bees, quite black, slender and wasp-like in appearance; the *Herzegovinians*, and the *Caucasians*. All the different races of the German bee are valued for their heavy producing qualities, some, as the *Carniolans*, are very mild tempered, very industrious and produce an exceedingly white wax, which makes their honey very salable. The Italian (or *Ligurian*) bees have received a great deal of attention all over the civilized world since 1860. This is no new race, being known in the time of Virgil, and even to Aristotle.

The Italians are of a lighter color than the German bee, they are thought to be more industrious, defend their hives against robbers and moths better than their German relatives, are certainly less irritable, and they have a somewhat longer tongue, so that they can gather honey from flowers inaccessible to the common bee. These bees have three golden bands on the abdomen by which the purity of the race is tested. The Italian bee in America tends to become much lighter colored than in Italy. This race of bees probably originated and was preserved when found in modern times, in a small district in the north of Italy, facing on the Gulf of Genoa and surrounded by high mountains. The race was first observed and described in modern times, by Spinola, in 1805, who gave the name Ligurian which prevails in Europe. The next we heard of these bees is that in 1843, Von Baldenstine, an Austrian captain, had introduced a few colonies into Germany; this man observed the habits of these bees while he was on military duty in Italy, and thinking them superior to the bees in his native country, when peace was proclaimed, hastened to introduce them to the farms of Austria. This is an excellent illustration of the importance of having men in every walk of life educated in natural history and observers of Nature. In 1848 Von Baldenstein published accounts of the Ligurian bees, and these coming to the eye of Dzierzon, the great German authority on bees, the Italians soon became widely introduced into Germany. In 1859 they were taken to both England and to America, and in 1860 were imported directly from Italy to America, where they have in many places almost entirely superseded the German bee.

The phenomenal activity in apiculture of the past ten or twelve years, has brought to light numerous other varieties of the *Apis mellifica*, the following of which are now to be found in American and European apiaries, viz: The *Cyprian* bee, from Cyprus, in the Mediterranean Sea. This race is very active, very prolific, but very irritable. It is a valuable bee.

The *Syrian* bee, from Syria, very prolific and very irritable. The bees from Palestine are said to be a variety of the Syrian, and have been introduced into America under the name of *Holy Land* bees. A bee from Smyrna has also been introduced into America as a distinct race. They are said to be very amiable. The Egyptian bee is very yellow and very cross. It is not considered valuable by Western bee-men, though it has been the bee of Egypt for centuries. Many American bee-keepers are industriously at work breeding, crossing and testing the various races named, in the hope that they may produce a strain with the good qualities of all the races and all the bad qualities eliminated. This bee of the future has been designated *Apis Americana*.

PROF. GEO. G. GROFF, L.L.D.

Bucknell University, Dec. 6, '87.

SUNDRY SELECTIONS.

A COLD CELLAR.

I called upon a friend last week and we went down into the cellar to see his bees—twelve or fourteen hives. Several of them had a little water on the entrance board and one had a little mould on one frame of comb. The covers are removed and nothing but the summer quilts and two thicknesses of old carpet over them. The temperature is low; nothing had frozen in the cellar, but it seemed to be about the freezing point. Would not a stove be a great help to improve the safe condition of this cellar for bees? Will you have the kindness to answer and point out the defects in this case in the C. B. J.

Feb. 1st, 1888.

No doubt the cellar is too cold and the bees not strong enough in the hives to create sufficient heat to carry off all moisture. Then again your summer quilts on the hives may be so covered with propolis that it prevents the moisture from escaping. You had better lift off these propolised quilts and put a dry saw-dust or chaff cushion on the top of each hive. As to the stove in the cellar that would be a great mistake. Sometimes your cellar would be too hot, and sometimes too cold, the sudden change would disturb the bees, break the cluster and cause the bees to gorge themselves with honey and dysentery would surely follow. In a late number of the JOURNAL there was an excellent plan (in our opinion) suggested of putting a lamp on the cellar floor and setting over it several links of stovepipe, which you might use. By this means a uniform